

Quality assurance in organic farming

E. Kabourakis
Ecological Production Systems Unit
National Agricultural Research Foundation
P.O Box 2229, 71003 HERAKLION, Crete GREECE
Tel. +30 2810 245851 Fax. +30 2810 245873
ekab@nagref-her.gr

Quality assurance in organic agriculture

- Verifiable standards ensure the credibility of the organic farming systems

Standard setting organisations

- **Intergovernmental bodies**
 - Generic in nature guidelines and national governments set more specific standards according to needs and situation of the country
 - eg. FAO/WHO Codex Alimentarius Commission
- **Governments**
 - Laws and regulations that include certification schemes, product labelling etc.
- **Industry**
 - Producer associations
 - Actors further down the chain (buyers or retailers)
 - Trade unions
- **NGOs**
 - Advocacy groups
 - Broader stakeholders
- **Coalitions of government, the private sector and NGOs**
 - eg. ISO, Ethical Trading Initiative (ETI)

Organic standards

- Organic farming methods were developed by farmers through ‘learn by doing’
- On-site inspection started around mid-1970s
- Regulations were put into force in the USA States of Oregon (1974) and California (1979)
- IFOAM standards were formulated in 1980.
- First European national regulation in France (1985).

Organic standards

- **EU regulation for the organic production of plant products (EC 2092/91) in 1991**
 - extended to include animal products in 1999.
- **Codex Alimentarius guidelines for the production, processing, labelling and marketing of organically produced food in 1999.**
 - revised to include livestock and livestock products in 2001.
- **Japanese Agricultural Standard (JAS) for plant production in 2001.**
- **US National Organic Program (NOP) in 2002.**

Organic standards

- Organic standards are dynamic and they are amended or changed according to:
 - the scientific developments,
 - technological achievements or
 - market demand.
- Basic principles are the same almost in all standards
 - slight variations are present among national standards
- The development of a standard starts with basic guidelines
 - then are elaborated and developed further into standards

Certification

■ Certification

- ‘is a procedure by which a third party gives written assurances that a product, process or service is in conformity with certain standards’ (ISO, 1966)

■ Certification body or certifier

- the organization performing the certification
- There should be no conflict of interest with the first (producer) or the second (buyer) parties

■ Certificate

- ‘demonstrates to the buyer that the supplier complies with certain standards’ and it is based on the inspection report and supported by other documents
- It is a form of communication between seller and buyer.

Accreditation

■ Certification programme

- the system of rules, procedures and management for carrying out certification
- a certification body may execute several certification programmes
 - eg. organic EC, NOP, GAP, EUREPGAP etc.

■ Accreditation

- the evaluation of the certification bodies by an authoritative body to ensure that they have the capacity to carry out certification programmes

■ Guidelines of accreditation is set by ISO, EU

- or some other entity working for the operation of certification and inspection bodies eg. IFOAM

European Union organic standards

- First European Union regulation was issued in 1991 for plant products (Regulation (EC) 2092/91).
- The regulation was extended to include animal products (Regulation (EC) 1804/99) in 2000.
- In each EU country inspection and certification is done by bodies authorized by the competent authority
 - Ministry that relates to food and/or agriculture.
- In the EU countries, inspection and certification bodies can be
 - state,
 - private or
 - both from state and private sector

European Union accreditation

- **Certification bodies need to have an accreditation by**
 - EN 45011 or
 - ISO Guide 65.
- **Regulation (EC) 2092/91 foresees equivalency and forms a third country list for non-EU countries.**
 - Countries in the list are the US, the Switzerland, the Israel, the Argentina etc.
 - non-listed countries:
 - Importers may obtain an authorization from individual member states for each imported product.
 - Importers must show evidence that the product was
 - produced and inspected according to the rules equivalent to EU organic standards and
 - certified by a certification body that operate in compliance with ISO Guide 65.
- **Since 2002, an original certificate has to be sent with the goods.**

US National Organic Programme

- Organic producers prepared the Organic Foods Production Act at the end of 1980s.
- The Act passed from the Congress in 1990
- The US Department of Agriculture was identified as the competent authority.
- The NOP came into force in October 2002.

US National Organic Programme accreditation

- NOP is administered by USDA
- NOP requires that all products sold in US as organic must be certified by a certification body or a state certification programme that is accredited by USDA.
- Foreign accreditation agencies can perform NOP accreditation only if accepted by USDA .
- ISO Guide 65 is voluntary for NOP.

Japanese Agricultural Standard

- **Ministry of Agriculture Fisheries and Food enacted JAS and it took effect in April 2001.**
- **Organic products of plant origin sold in Japan needed to**
 - **bear JAS seal and**
 - **be certified by an approved and registered certification body.**
 - **JAS rule requires that each processing or packaging plant has a qualified ‘grading manager’ responsible for the review of JAS compliancy.**

Codex Alimentarius organic guidelines

- Codex Alimentarius Commission started in 1991 by
 - FAO/ WHO Food Standards Programme and
 - organizations as IFOAM and EC that participated as observers.
- The first version on plant products was adopted in 1999 and revised in 2001 to include livestock and livestock products.
- They are in similar line as IFOAM International Basic Standards and EC regulation.
- They are revised every 4 years.

IFOAM accreditation

- The International Organic Accreditation Service (IOAS) belongs to IFOAM and acts for accreditation.
- IOAS accredits certification bodies that have organic certification programmes that comply with IFOAM Basic Standards and IFOAM Accreditation criteria
- In 1999, IFOAM Accredited Certification Bodies (ACB) signed a multilateral agreement to facilitate acceptance of products that were certified by an ACB.

Similarities in organic farming regulations

- All regulations have rules on production, processing and harvest of wild products
- Retailer certification is not compulsory
- Have annexes for inputs allowed to be used in production and processing
- Special requirements for importation

Major differences in organic farming regulations

- Scope of organic farming regulations differs
- NOP has separate lists for “allowed synthetics” and ‘forbidden non-synthetics’
- Different requirements for domestic production and imports
- Different voluntary or compulsory aspects
- NOP has an exemption for certification for those with an annual income below 5000 \$ and retailers
- Labelling is different

Labelling of organic products

- Labelling is a form of communication with the end consumer
- To have an effective communication label must be meaningful
 - Backed up by a good certification programme without conflicts of interest
 - System must be transparent,
 - Information on the content and on the organization must be accessible
 - There should be opportunities for public comment
 - Must be consistent across the range of products



Labels and logos

Table 12: Logos (government and private) for organic products in Europe

Belgium (private)	Denmark (state)	Germany (state)
		
Netherlands (state)	Norway (private)	Austria (state)
		
Switzerland (private)	Finland (state)	France (state)
		
Spain (state)	Czech Republic (state)	Sweden (private)
		

Inspection in accordance organic regulations

- **Initial farm visit**
- **Surveillance farm visits**
 - **Announced**
 - **Non announced**
- **Check of the product**
 - **Random sampling and chemical analyses of the products**

Farm inspection

- Inspection of all plots
- Comparison with the data reported in the application form
- Checking the borders of the plots that are at risk of contamination
- Technical and crop information
- Verifying the date of the last treatment
- Control for remaining conventional goods
 - e.g. Unsold products, fertilizers, pesticides, etc.
- Control of compulsory records
 - Purchased goods records
 - Crops records
 - Sold products records
 - In case of processing of products inside the farm processing records
 - Annual Production Program

Farm surveillance visit

- **The inspector pays at least one complete annual visit in which:**
 - visits all the farm plots
 - checks the stocking areas
 - checks the farm records
 - checks the farm accounts
 - checks any other farm activity
- **The inspector visits the farm during specific phenologic phases and/or assessment of the production(s)**
- **The inspector takes samples for chemical analysis**
 - according to an annual analysis plan
 - according to his own judgement

Processing unit inspection

- **The processing must:**
 - **guarantee 70% at least of organic ingredients**
 - **non-organic ingredients must be necessarily among the ones included in a very restrictive list of ingredientsi (part C of Annex VI) recognized by the EU as non available on the market on a suitable quantity.**
- **GMOs and their derivatives are forbidden**
- **The use of ionizing radiations is forbidden**

Processing unit inspection

- Separated storage of organic goods
- Clear identification of:
 - raw materials,
 - final product
 - products in the processing phase
- Traceability auditing

Processing unit inspection

- **Separation of the production process from any conventional:**
 - **Spatial**
 - different processing line
 - **Temporal**
 - different timing
 - a conventional line can be used only after cleaning

Processing unit inspection

- **Records of :**
 - **Suppliers list and qualifications**
 - **Certificates of the raw materials**
 - **Quantities of raw materials**
 - **Quantities of the processed final products**
 - **Processing**
 - **Recipes used**

Processing unit surveillance visit

- **The inspector pays at least one complete annual visit in which:**
 - Checks the stocking areas
 - Checks input and outputs
 - Check the certificates of the raw materials
 - Checks the unit records
 - Checks the unit accounts
 - Check the conformity of all the sectors of the unit certified
- **The inspector visits the farm during specific processing phases**
- **The inspector takes samples for chemical analysis**
 - According to an annual analysis plan
 - According to his own judgement

Certification Committee

- The certification committee evaluates the reports of the inspectors and decides about the status of the inspected unit
- The Certification Committee evaluates:
 - the inspected unit dossier
 - the inspection report
 - integrative documents regarding the unit
 - results analysis
 - The product in accordance UNI EN 45011 accreditation must be free from non allowed pesticides, that can be present in a quantity non exceeding 0.01 mg/kg (= 0.01 ppm = 10 ppb) due to accidental contamination
- Ratify the judgment of conformity of the unit, the conversion period and issues eventual prescriptions

Certificate of conformity

- The certification committee when there is a positive judgment issues the certificate of conformity for the unit
- The certificate of conformity states the:
 - positive outcome of the evaluation
 - type and/or the productive sectors and/or the production lines for which the unit was evaluated
 - operator code
 - standards the issued certificate corresponds
 - product(s)
 - period of validity

Certificate of quantity

- **The certification body when certification of conformity is issued then issues:**
 - **Batch (or lot) certificate**
 - Issued for products sold loose and/or meant for a future processing
 - **The certificate has one year validity and can be renewed**
- **The certificate body authorises the farm or processing unit to print product labels**

Rejection of conformity certificate

- The certification committee when there is a negative judgment issues an evaluation report for the unit
- The report states the:
 - negative judgment
 - reasons for the negative judgment
 - corrective measures
 - time and means of appeals

Rejection of conformity

■ In case of non-conformity the type of it is very important:

● Irregularities

- generally concern documents
- that do not harm the conformity of the product or the ability of the company

● Infractions

- Non-conformities due normally to failing to respect the standards
- Heavy irregularities in the documents
- Use of non-allowed substances
- Use of conventional ingredients that are not allowed in the processing

Sanctions when there is rejection of conformity

■ In case of non-conformity the following sanctions apply:

● Written warning

- In case of irregularity the company is called to solve the non-conformity at the earliest.
- Repeated warnings can bring to heavier sanctions

● Cautionary suspension

- Following infractions with immediate effect on the conformity of the product, will be suspended temporarily the possibility to certify a batch of product, or the harvest, or up to the whole company production.
- The suspension is then ratified by the Certification Committee

Sanctions when there is rejection of conformity

■ In case of non-conformity the following sanctions apply:

- **Withdrawal of the certification**
 - the authorization to print the labels is suspended.
 - the harvest is not certified and the conversion has to be started again.
- **Withdrawal of the company certificate**
 - It is applied when
 - heavy infractions and irregularities are repeated.
 - when following a suspension the company does not follow the due corrective actions
 - when the Operator does not pay for the control and certification activity.
- **All the actions are communicated to the competent authority and the other Control Bodies**